Daily Diary Report by Bid Item

Contract No.: **04-0120F4**

Diary #: **820** **Const Calendar Day:** 308 **Date:** **08-Apr-2013** **Monday**
Inspector Name: **Bruce, Matt** **Title:** **Transportation Engineer**
Inspection Type: Intermittent
Shift Hours: 07:00 am 03:30 pm **Break:** 00:30 **Over Time:**
Federal ID:
Location:
Reviewer: **Schmitt, Alex** **Approved Date:** **Status:** Submit

04-0120F4
04-SF-80-13.2/13.9
Self-Anchored
Suspension Bridge

Weather

Temperature **7 AM** 40 - 50 **12 PM** 50 - 60 **4PM** 50 - 60
Precipitation 0.00" **Condition** Mostly cloudy

Working Day ☐ If no, explain:

Diary: Dispute ☐

Work description.

- Inspected the stressing operation to verify the Pjack load in tower foundation anchor rods with Sami Daouk, see his diary for the ABF ironworker names. Today Boltight pump number 59836-0577000106 with gauge number 29901041/18 was used for verifying the loads in all rods mentioned below. Similarly Boltight jacks RN7194, RN7197 and RN 7208 was used for this stressing operation. Sami took the majority of measurements on the anchor rods stressed today from the top surface of the bearing plate to the end of the anchor rod before and after load verification of the anchor rods.

Began the shift attempting to try and detension anchor rods W73 and W75 since the jacks were already on these rods. The jacking pressure was brought up to 13.2ksi 3 times, then to 10.0ksi and 9.0ksi in an attempt to break the nut loose with no success. After the last stressing cycle it was observed that the jack bridge/gearbox was broken. While waiting for two new replacement bridge/gearboxes the third jack was used to try and detension W73 and W75 with no success. These two rods will need to be addressed either by using other means to torque the nut or by an RFI.

When it was decided to abandon rods W73 and W75 an attempt was made to check the pressure in anchor rods E56 and E72 where the nut seized on the rod threads. The pressure in anchor rod E56 when the jack ram began to lift off was 6.0ksi and for E72 the pressure was 9.0ksi.

ABF ironworkers then received two new jack bridge/gearboxes and proceeded to stress anchor rods b1(E)11 and 12. After spending a considerable amount of time and effort trying to fix the threads on rod 11, the decision was made to use shims to account for the difference between the jack puller and tensioner. See photos below for more details on this setup. Due to the shim setup both rods were stressed independently of each other. The first anchor rod to be stressed was b1(E)11 to ram pressure cycles of 5.0ksi, 9.0ksi, then to 13.3ksi. Similarly pressure cycles for anchor rods b1(E)12 which was stressed for the first time were 5.8ksi, 11.3ksi, and 13.2ksi. Elongations for anchor rod 11 was 225-242 = 17mm, and for rod 12 the change in length was from 224-242 = 18mm. Both rods were then tested together in series before the jacks were removed.

As in previous days all 3" anchor rods were stressed to 105% of Pjack. The majority of the nuts were found to be loose today and three stressing cycles were run to Pjack at 13.2ksi. The practice to verify the load in the anchor rods by checking the anchor rod nut at 5.0ksi, 10.0ksi, and then to 13.2ksi before conducting 2 more cycles straight up to 13.2ksi or 105% Pjack was done for all rods today.

It also should be noted that ABF engineer Andre Markarian was not present for the stressing operation today.

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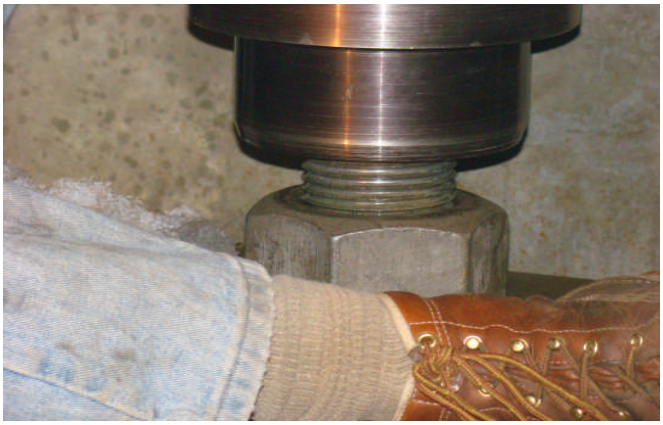
Job Name: 04-0120F4 **Inspector Name** Bruce, Matt **Diary #:** 820 **Date:** 08-Apr-2013 Monday

Attachment

Shims placed underneath the bridge/gearbox to enable anchor rod b1(E)11 to be stressed.



Gap between the jack puller and the anchor rod nut which needs to be bridged in order to stress the rod.